Implementing IFPS on PX Systems

Welcome to the Neighborhood

Topics

Implementing IFPS on the PX Systems

- Requirements
- Implementation
- Side Effects
- Install Strategy
- Schedule Issues
- PX Design Team

Requirements

Implementing IFPS on the PX Systems

- Performance
  - PX hardware is faster, doesn't share resources with other processes, like GFE, master menu, D2D, etc.
- OCONUS Multiple Domain Support
  - Two pairs of PX boxes are AFC, VRH, TBW4
  - Design Review scheduled for 06/18 at 11:00 am

Implementation

Implementing IFPS on the PX Systems

- Servers
- Crons
- Guidance Ingest Processes
  - MOS
  - Raw Model
- Directory Structure
- System Changes

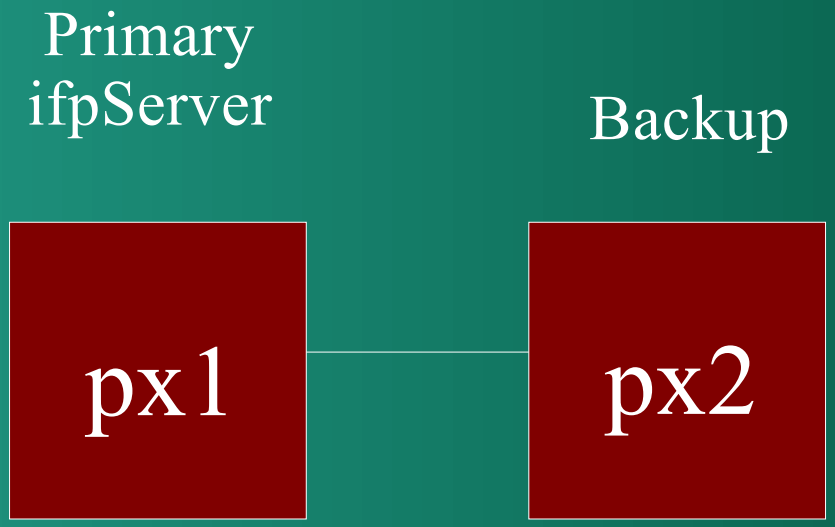
Implementation – Servers

Implementing IFPS on the PX Systems

- All IFPS servers run on px1f
  - IfpServer, ifpServerWatcher, sirsserver and sliderParameter servers will move to PX1f from LX1
- New scripts created for starting/stopping servers
  - Start_PX_ifps_servers and stop_PX_ifps_servers
  - Will replace start_LX_ifps_servers and stop_LX_ifps_servers

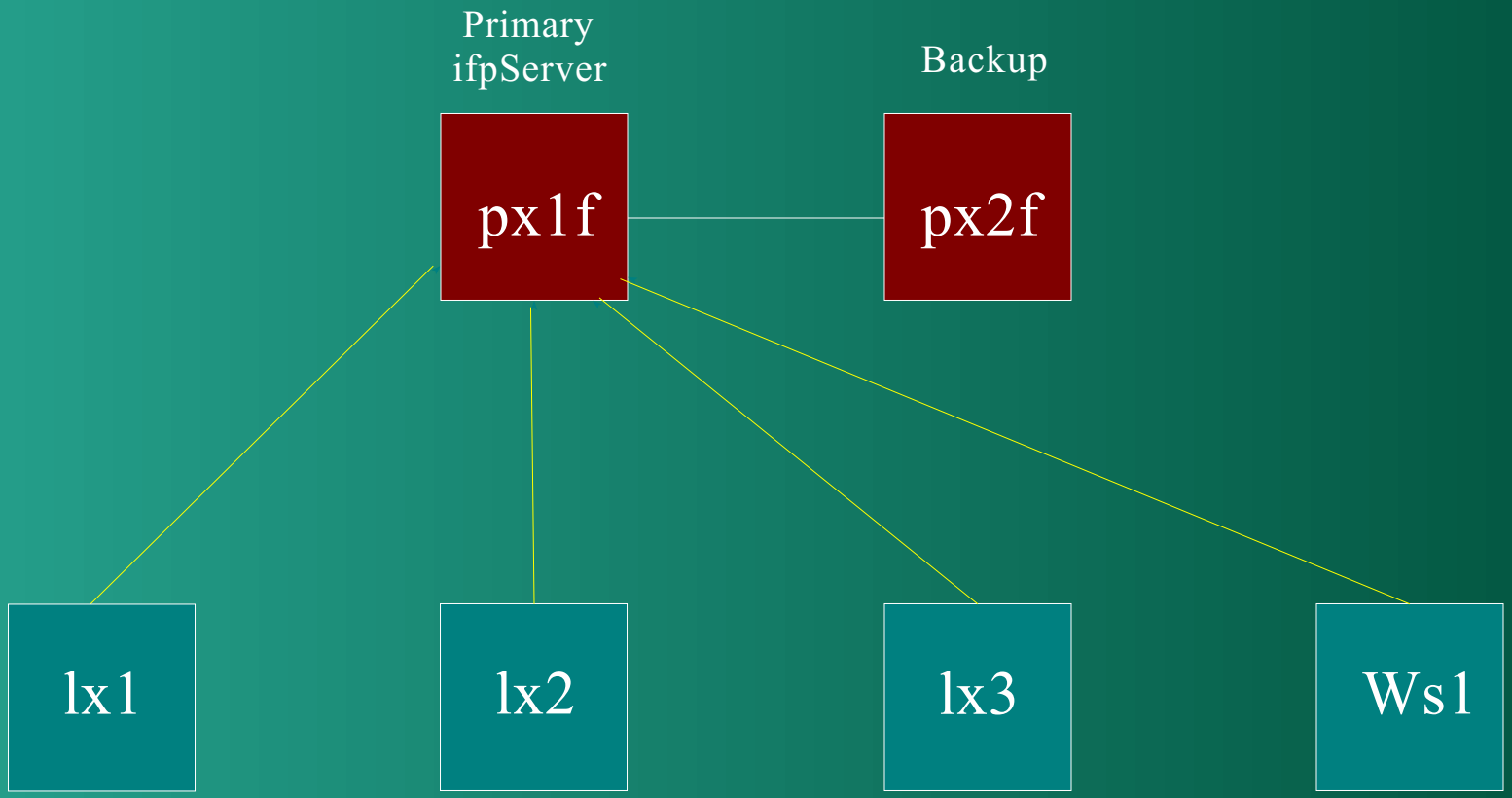
Implementation - Servers

Implementing IFPS on the PX Systems



Implementation - Servers

Implementing IFPS on the PX Systems



All lx or workstations acces ifpServer on px1f

Implementation - Crons

Implementing IFPS on the PX Systems

- Ifps-ccc.crontab
  - Remains on DS1
  - Dumps tdlfs to format usable by IFPS (text file)
  - Purges logfiles (both GFESuite and IFPS)
- Ifps_mosingest_crontab.sh on px2f
  - Creates dynamic tables to ifps_ccc database
  - Controls mos ingest process
  - Processes TSFP via crons
  - Purges logfiles (both GFESuite and IFPS)

Implementation - Crons

Implementing IFPS on the PX Systems

- Ifps-purge.crontab on all remaining systems
  - Purges logfiles
- Ifps_diskmirror.crontab
  - SEE YOU LATER!

Implementation - MOS

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- MOS ingest process to PX2f
  - Future plans to port MOS BUFR decoder to px2f
  - PX2f supports other point based data
  - Access to /data/fxa/mos/point
  - Load balance between px1 and px2

Implementation - Raw Model

Implementing IFPS on the PX Systems

- Raw model ingest process on px1f
  - Done through ifpServer ingest processes
  - PX1f supports other raw model data
  - Load balance between px1 and px2

Implementation - Directory Structure

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- /awips/GFESuite
  - Size: 30 Gb
  - Place: container 1 on PX RAID
  - Sub-directories
    - Primary
    - Svcbu

Implementation - Directory Structure

Implementing IFPS on the PX Systems

- /awips/ifps
  - Size: 1.5 Gb
  - Place: Local partition on PX1,PX2,LX1,LX2...
  - Holds Linux binaries and shared libraries
  - Removes NFS dependancies
  - Sub-directories
    - Primary
    - Svcbu

Implementation - Directory Structure

Implementing IFPS on the PX Systems

- /awips/adapt on DS
  - Mounted on PX1 and PX2 also.
  - Holds IFPS configuration files (i.e. stuff under data,localbin,Xdefaults, etc...)
  - Still holds HP and other ADAPT binaries
- /data/logs
  - Logfiles for IFPS on all systems (local)
- /data/adapt
  - Mounted on px1/px2
  - Holds backup files during IFPS install

Implementation - System Changes

Implementing IFPS on the PX Systems

- Failover between PX1 and PX2
  - No need to use homegrown failover
- Environment
  - IFPS environment still controlled by ifps-main.env and ifps-ccc.env
  - Still reside in /awips/adapt/ifps/bin/hp and /awips/adapt/ifps/localbin, respectively
- System path
  - HP $PATH stays the same
  - Linux $PATH includes /awips/ifps/primary

Side Effects

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- Service Backup
  - New directory structure
  - NFS dependancies
  - Backup server on px1

Install Strategies

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- AWIPS OB2 required
- System changes will precede IFPS15 install
  - Day 1: system changes
  - Day 2: IFPS15 install
- IFPS15 is still deinstallable
- System changes are NOT deinstallable

Install Strategies

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- Install script runs from PX1 instead of DS1
- Uses IFPS14 GFESuite backup to populate IFPS15 /awips/GFESuite on px1
- All database changes done through sqlcmd on PX1
- /awips/ifps is rcp to PX2, and all LXs from PX1
- Install utilities (i.e. merge_envfiles, read_instructions, etc.) are ported to linux

Schedule Issues

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- Still under work
  - Coordination between MDL and SEC

PX Design Team

Implementing IFPS on the PX Systems

- MDL
  - Ronla Meiggs, Manan Dalal, Matt Peroutka, and Jim Calkins
- SEC
  - Bill Carrigg, Stowe Davison, and Tim Hopkins
- FSL
  - Mark Mathewson, and Mike Romberg
- NGIT
  - Doug Rankin, Andre Salas, Bruno Vercillo, Jason Holfman, and Erin Lucks

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